

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Original) A recording medium including recorded data, comprising:

pits formed along tracks, with data recorded therein, the data including copy protection information for encryption and/or decryption, wherein pits formed in some portions of the tracks are shifted from a track center to left and/or right to thereby form intermittent or alternate wobbled pits, wherein key information for encryption and/or decryption is encoded in a deviation shape of said pits shifted from the track center.

2. (Original) The recording medium according to claim 1, wherein the wobbled pits are in a lead-in zone of an information area of the recording medium.

3. (Original) The recording medium according to claim 2, wherein the wobble pits are in a permanent information & control (PIC) data area of the information area of the recording medium.

4. (Original) The recording medium according to claim 1, wherein the wobble pits are in a burst cutting area (BCA) of an information area of the recording medium, and the BCA includes disc type information.

5. (Original) The recording medium according to claim 1, wherein data is encoded in the deviation shape of said wobbled pits.

6. (Original) The recording medium according to claim 5, wherein said deviation shape has bi-phase modulated bit values.
7. (Original) The recording medium according to claim 1, wherein said data includes information about the recording medium including the type of the recording medium.
8. (Original) The recording medium according to claim 1, wherein said data includes decryption information for decrypting encrypted contents recorded on the recording medium.
9. (Original) The recording medium according to claim 1, wherein said data further includes at least one of a serial number of the recording medium, disc information, and disc important information.
10. (Original) The recording medium according to claim 1, wherein said copy protection information is a copy protect flag.
11. (Original) The recording medium according to claim 9, wherein said disc information and said disc important information may be recorded in the wobbled pits.
12. (Original) The recording medium according to claim 11', wherein said wobbled pits are detected by push-pull signal detection.

13. (Original) The recording medium according to claim 9, wherein said disc information may be recorded in straight pits.

14. (Original) The recording medium according to claim 13, wherein said straight pits are detected by RF signal detection.

15. (Original) The recording medium according to claim 1, wherein said recorded data is recorded in straight pits and said straight pits are detected by RF signal detection.

16. (Original) The recording medium according to claim 3, wherein information about the recording medium including the type of the recording medium is recorded with modulation as straight pits positioned in said PIC zone, wherein the straight pits are not shifted from the track center.

17. (Original) The recording medium according to claim 3, wherein decryption information for decrypting encrypted data recorded on the recording medium is recorded with modulation as straight pits positioned in said PIC zone.

18. (Original) The recording medium according to claim 17, wherein decryption key information for decrypting said encrypted decryption information is encoded in the deviation shape of said pits shifted from the track center.

19. (Original) The recording medium according to claim 1, wherein arrays of said pits shifted from the track center are formed intermittently at more than two places.

20. (Original) The recording medium according to claim 19, wherein a length of an array of straight pits between arrays of said pits shifted from the track center is larger than a length of arrays of said pits shifted from the track center.

21. (Original) The recording medium according to claim 19, wherein each of the arrays of said pits shifted from the track center has a different length.

22. (Original) The recording medium according to claim 21, wherein each of the arrays of straight pits between arrays of said shifted pits has a different length.

23. (Original) A method of forming a recording medium, comprising:

forming pits formed along tracks, with data recorded therein, the data including copy protection information for encryption and/or decryption, wherein pits formed in some portions of the tracks are shifted from a track center to left and/or right to thereby form intermittent or alternate wobbled pits, wherein key information for encryption and/or decryption is encoded in a deviation shape of said pits shifted from the track center.

24. (Original) A method of reproducing data from a recording medium, comprising:

utilizing data recorded in pits formed along tracks, the data including copy protection information for encryption and/or decryption, wherein pits formed in some portions of the tracks are shifted from a track center to left and/or right to thereby form intermittent or alternate

wobbled pits, wherein key information for encryption and/or decryption is encoded in a deviation shape of said pits shifted from the track center.

25. (Original) A method of recording data on a recording medium, comprising:

recording data in pits formed along tracks, the data including copy protection information for encryption and/or decryption, wherein pits formed in some portions of the tracks are shifted from a track center to left and/or right to thereby form intermittent or alternate wobbled pits, wherein key information for encryption and/or decryption is encoded in a deviation shape of said pits shifted from the track center.

26. (Currently Amended) An apparatus for reproducing data from a recording medium, said apparatus utilizing pits formed along tracks, with data recorded therein, the data including copy protection information for encryption and/or decryption, wherein pits formed in some portions of the tracks are shifted from a track center to left and/or right to thereby form intermittent or alternate wobbled pits, wherein key information for encryption and/or ~~de-encryption~~decryption is encoded in a deviation shape of said pits shifted from the track center.

27. (New) A recording medium, comprising:

indicating information indicating whether or not the recording medium contains copy protection information for use in generating or processing copy protected user data, wherein the indicating information and/or the copy protection information are formed as a wobbled pattern and copied to a specific area.

28. (New) The recording medium according to claim 27, wherein the copy protection information is key information for use in encrypting/decrypting data.

29. (New) The recording medium according to claim 27, further comprising:
physical format information for recording or reproducing data.

30. (New) The recording medium according to claim 29, wherein at least the copy protection information and the physical format information are copied to the specific area.

31. (New) The recording medium according to claim 30, wherein the specific area is an area within a lead-in area of the recording medium.

32. (New) The recording medium according to claim 27, wherein the indicating information and/or the copy protection information are recorded by a phase modulated method.

33. (New) The recording medium according to claim 27, wherein the copy protection information is repeatedly recorded within a data unit.

34. (New) The recording medium according to claim 33, wherein the data unit includes a plurality of address units, each of which includes a plurality of data frames, wherein the copy protection information is recorded in each first data frame.

35. (New) A method of recording data on a recording medium comprising:

utilizing indicating information indicating whether or not the recording medium contains copy protection information for use in generating or processing copy protected user data, wherein the indicating information and/or copy protection information are formed as a wobbled pattern and copied to a specific area; and

recording the data based on the copy protection information.

36. (New) The method according to claim 35, wherein at least the copy protection information and physical format information are copied to the specific area and the physical format information is used for recording or reproducing data.

37. (New) The method according to claim 36, wherein the specific area is an area within a lead-in area of the recording medium.

38. (New) The method according to claim 35, wherein the indicating information and/or the copy protection information are recorded by a phase modulated method.

39. (New) The method according to claim 35, wherein the copy protection information is repeatedly recorded within a data unit.

40. (New) The method according to claim 39, wherein the data unit includes a plurality of address units, each of which includes a plurality of data frames, wherein the copy protection information is recorded in each first data frame.

41. (New) A recording medium, comprising:

first information for use in generating or processing copy protected user data and second information for use in generating or processing copy protected first information, wherein the first information and/or the second information are formed as a wobbled pattern and copied to a specific area.

42. (New) The recording medium according to claim 41, wherein the first information is key information for use in encrypting/decrypting data.

43. (New) The recording medium according to claim 41, further comprising:

physical format information for recording or reproducing data.

44. (New) The recording medium according to claim 43, wherein at least the first information and the physical format information are copied to the specific area.

45. (New) The recording medium according to claim 44, wherein the specific area is an area within a lead-in area of the recording medium.

46. (New) The recording medium according to claim 41, wherein the second information is recorded by a bi-phase modulated method.

47. (New) The recording medium according to claim 41, wherein the first information is repeatedly recorded within a data unit.

48. (New) The recording medium according to claim 47, wherein the data unit includes a plurality of address units, each of which includes a plurality of data frames, wherein the first information is recorded in each first data frame.

49. (New) A method of recording data on a recording medium, comprising:

utilizing first information for use in generating or processing copy protected user data and second information for use in generating or processing copy protected first information, wherein the first information and/or second information are formed as a wobbled pattern and copied to a specific area; and

recording the copy protected user data in the recording medium.

50. (New) The method according to claim 49, wherein the first information is key information for use in encrypting/decrypting data.

51. (New) The method according to claim 49, wherein at least the first information and physical format information are copied to the specific area and the physical format information is used for recording or reproducing data.

52. (New) The method according to claim 51, wherein the specific area is an area within a lead-in area of the recording medium.

53. (New) The method according to claim 49, wherein the second information is recorded by a bi-phase modulated method.